

REMARKS

The present invention relates to a method for producing a resin fine particle.

In the Office Action of March 21, 2008, in the Office Action Summary the Examiner indicated the rejection of examined claims 1 and 3 - 9, the withdrawal of claims 2 and 10 - 20, acceptance of the drawings, receipt of the certified copy of the priority document, consideration of Applicant's Information Disclosure Statements (with all art being considered for the Information Disclosure Statements filed in October 2005, January 2006, and March 2006), and the Examiner cited two new U.S. patents on Form PTO-892.

At pages 2 - 3 of the Office Action, the Examiner reiterated the telephonic restriction requirement and Applicant's election of Group I, claims 1 and 3 - 9 for examination. At page 3, the Examiner objected to claims 1 and 3 - 9; the Examiner indicated that the claims are understandable, but are "not readily clear because of awkward wordings". Lastly, claims 1 and 3 - 9 were rejected at page 4 under 35 U.S.C. § 102(b) based on Japanese 2003-268119 (JP '119).

Applicant has herein amended claims 1, 2, and 5, with claims 1 and 5 being amended to improve clarity and to more clearly indicate the distinction of the present invention vis-à-vis the cited prior art. Claims 2 has been consistently amended with respect to the amendment of claim 1, and to explicitly indicate that step 2 is carried out while maintaining the air-tight state.

The amendments to the claims are supported, e.g., by the disclosure at page 10, line 8, - page 11, line 17 of the specification. Below, Applicant further explains the present invention

vis-à-vis the cited prior art, based on which, it is respectfully submitted, the Examiner will be able to understand and appreciate the distinction of the presently claimed invention *vis-à-vis* the cited JP '119 reference.

Novelty of claim 1

The fluid in supercritical state or subcritical state has both the diffusivity which a gas has and the solubility which a liquid has. Accordingly, even if it is a poor solvent for a resin at a normal temperature and normal pressure, the fluid can be a good solvent for the resin in a supercritical or subcritical state, and thus can dissolve and diffuse the resin therein. After that, when the temperature is decreased and the pressure is decreased, the fluid again becomes a poor solvent, and the dissolved resin is thereby precipitated. Since the resin is dispersed to a remarkably high extent in the fluid in the supercritical or subcritical state, it is understood that the precipitated resin is extremely small and almost completely spherical, owing to the surface tension. Please see page 5, lines 22 - 34 of the specification.

To achieve this advantage, step 2 of amended claim 1, i.e., "quenching the pressure resistant container for decreasing the pressure while maintaining the air-tight state" is very important. More concretely, this is a method in which the pressure resistant container may be air cooled or cooled with water, without opening the pressure resistant container before it is sufficiently cooled. Please see page 11, lines 15 - 17 of the specification.

With the method for producing a resin fine particle of this invention, a suspension of the resin fine particles can be obtained. The resin fine particles in the obtained suspension have a

very small average particle diameter (1 μm or smaller), almost complete sphericity (sphericity of 1.25 or lower), and have a very narrow particle diameter distribution (a CV value of the particle diameter of 5% or lower). Please see Table 1 of the specification.

JP '119 discloses a manufacturing method of a granular material by mixing a gas or supercritical fluid and a polymer under a high pressure atmosphere, grinding said polymer by making a mixture by said mixing into decompression and low temperature rapidly, and generating resin powder. However in JP '119, the polymer powder is produced by injecting into a sealed high pressure vessel 1 charged with a polymer through a liquid feed pump 2, mixing the crosslinked polyethylene therewith under a high pressure atmosphere, followed by discharge thereof into the air (the atmosphere) of a room-temperature atmospheric-pressure condition through a nozzle 1a, and at the same time, crushing the crosslinked polyethylene using a volume expansion caused by the rapidly reduced pressure and temperature. Please see abstract, column 0009 or Figure 1. In JP '119, the solution, including a supercritical fluid solvent and the polymer, must jet out from nozzle.

Even if the Examiner may consider JP '119 to disclose the step 1 of this invention, JP '119 clearly does not disclose the step 2. Without step 2, it may be possible to obtain resin fine particles. However, it is impossible to obtain a resin fine particles which have all of (1) a very small average particle diameter, (2) almost complete sphericity, and (3) a very narrow particle diameter distribution.

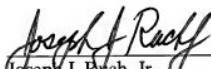
Thus, it is seen that the presently claimed invention and JP '119 are quite different from each other.

In view of the above, reconsideration and allowance of examined claims 1 and 3 - 9 of this application are now believed to be in order, and such actions are hereby earnestly solicited.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local Washington, D.C. telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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